

ABSTRACT OF THE DISCLOSURE

Alignment between the wheels of a vehicle is determined using a position determination system and includes indicating wheel positions on the vehicle with targets; imaging the targets to obtain locations of the wheel positions; and calculating a relationship between the front and rear wheels. Alignment is aided by calculating rear and front wheel tracks and comparing the calculated front and rear wheel tracks to a specified range for the front and rear wheel tracks. Also, right and left wheel bases can be calculated and the calculated right and left wheel bases to can be compared a specified range for the right and left wheel bases. Measures of offset and skew can also be obtained. A computer-implemented position determination system for determining alignment between the wheels of a vehicle is disclosed.